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Procedia - Social and Behavioral Sciences 30 (2011) 1251 – 1256

Procedia
Social and Behavioral Sciences

WCPCG-2011

Involvement in Entrepreneurial Training and Personality

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Abstract

The research aims to explore the relationship between the entrepreneurial traits and the involvement in the development of entrepreneurial competences by means of training courses offered by the university. Significant relationships were identified between entrepreneurial potential and the following personality variables: entrepreneurial skills, resources organization, internal locus of control, and creativity. No significant relationship between average risk propensity and entrepreneurial potential was identified. The participants with high entrepreneurial potential proved to be more aware of the discrepancy in this respect.

Selection and/or peer-review under responsibility of the 2nd World Conference on Psychology, Counselling and Guidance.

Key words: entrepreneurial personality; entrepreneurial behaviour; entrepreneurship development; proactivity.

1. Introduction

Entrepreneurship is considered a veritable engine for the economic development of a country, a way of creating new jobs and national wealth. All the countries are concerned with developing entrepreneurship for different segments of the population, such as minorities, women, and disadvantaged groups, as a way of stimulating economical development. But for a former communist country, such as Romania, the issue of entrepreneurship development is even more important because of the mentalities embedded by the decades of ideology driven education, which produced citizens relying too much on the state as a job provider and source of welfare. During the communist era, entrepreneurial behaviours were blamed, considered dishonest, "capitalist," and even a threat to the social order. Twenty years after the fall of the communist regime, entrepreneurship is being promoted by various training programs, but changing mentalities and developing entrepreneurial competences takes a long time.

The research in the field of entrepreneurial personality is quite rich in Western countries, but scarce in Romania, which has no recent tradition in entrepreneurship. The purpose of our research is to explore the relationship between personality variables and the intentions to become an entrepreneur in university undergraduate and postgraduate students, in the context of the new developments in the Romanian economy, the gradual change in mentality concerning entrepreneurship, and the efforts of the government tot stimulate individual initiative in the business sector.

One big question about the determinants of entrepreneurship is if they are personality traits or rather factors belonging to the social context. If the determinants are personality traits, are they narrow, specific, or broad? Holland (1985) created a six-dimension model of vocational personality types, in which the "enterprising

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Selection and/or peer-review under responsibility of the 2nd World Conference on Psychology, Counselling and Guidance.
doi:10.1016/j.sbspro.2011.10.242

personality" is related to adjustment to entrepreneurial activities. A recent research using this model (Schmitt-Rodermund, 2004) links this personality type to entrepreneurial career prospects and earlier timing of business start-ups in students.

Crant (1996) identifies five personality traits linked to the entrepreneurial interest and behaviour: achievement motivation, internal locus of control, average risk propensity, tolerance of ambiguity and A-type behavioural pattern; Kickul & Gundry (2002) state that the relevant traits for entrepreneurship are: achievement motivation, autonomy, tolerance of ambiguity and moderate risk propensity; Chell (2008) mentions "the Big Three of entrepreneurship": internal locus of control, moderate risk-taking propensity and high need for achievement. Other traits mentioned by different authors as important for entrepreneurship are: creativity and innovation (Ward, 2005; Weitzel, Urbig, Desai, Sanders & Acs, 2010), independence (Fisher & Koch, 2008). Brandstätter (in press), in a meta-analysis review of the studies published during the past two decades, reports previous research focused on factors measured by the Big Five (C+, O+, N-, and E+) as being predictive for entrepreneurial intention, respectively for entrepreneurs' performance.

The nature of the entrepreneurial personality is also in debate: the internal determinants of the actual entrepreneurial behaviour are inherited or learned, with obvious consequences on education and social politics. The debate still goes on, some authors asserting the innate nature of the entrepreneurial personality (Fisher & Koch, 2008), while other authors are convinced that it is a product of learning, a "social construction" (Chell, 2008). Recent studies on the heritability of entrepreneurship propensity show that there is a strong innate component in the tendency to be self-employed (Nicolaou & Shane, 2010) and entrepreneurial (Zhang, Zyphur, Narayanan et al., 2009). On the other side, the social dimensions of entrepreneurship, such as social network and social capital are not to be ignored as determinants of entrepreneurial survival and success (Ulhøi, 2005).

Despite the considerable attention given in the literature to the personality of entrepreneurs, there are many controversies regarding the relationship between personality traits and entrepreneurship success. Dvir, Sadeh & Malach-Pines (2010) assert that one can rather speak about a fit between personality and the type of activity. Education, family business experience, and access to financial capital are among the more traditionally identified determinants of entrepreneurial success. Other studies emphasise the importance of demographic and social variables such as gender, education and family experience with business (Wang & Wong, 2004).

Among environmental determinants of entrepreneurship which influence the preference, intention, actual behaviour, performance, education is an important one. Personality traits are not enough in the absence of appropriate knowledge and skills, but they predispose individuals to benefit more from entrepreneurial training (Fairlie & Holleran, in press). Results from a recent German research support the idea that entrepreneurship can be promoted early in life by education (Obschonka, Silbereisen & Schmitt-Rodermund, 2010). Even if the entrepreneurial training is compulsory, students can learn about their entrepreneurial abilities and interest, clarifying thus their future career choices (von Graevenitz, Harhoff & Weber, 2010). Educational programmes aiming at the development of entrepreneurial competences do make a difference, providing not only knowledge, but attitude change towards entrepreneurship (Souitaris, Zerbinati & Al-Laham, 2007).

2. Method

The research aims to explore the relationship between the entrepreneurial traits and the involvement in the development of entrepreneurial competences by means of training courses offered by the university. Specifically, the research aimed to identify the personality profile of the potential entrepreneurs, starting from the assumption that all the students involved in the program have the intention of becoming entrepreneurs. Thus, the intention to attend courses in the field of entrepreneurship can be considered a criterion of self-selection for the candidates.

2.1. Hypotheses

We expect that participants with a high potential of opening an independent business have a higher level of some relevant personality traits, such as entrepreneurial skills, social skills, resource organization, creativity,

independence, internal locus of control, proactivity, and achievement motivation. We expect that individuals with a high entrepreneurial potential have a moderate risk propensity. We also expect that the individuals with high entrepreneurial potential have an intense awareness of their training needs.

2.2. Participants and procedure

The population of the research consisted of 105 male and 110 female, undergraduate and postgraduate students, with an average age of 24, candidates for the training modules in entrepreneurship organized by the university. They were recruited from all faculties, based on their intention to become entrepreneurs and on their desire to learn about entrepreneurship and business. The instruments were applied during several sessions, from fall 2009 to fall 2010. The training courses were advertised in the university and the candidates from all faculties and cycles (bachelor, master and doctoral) enrolled for this training program as extracurricular activity.

2.3. Measures

The Semi-structured Interview for the Assessment of the Entrepreneurial Potential, conducted by an independent operator after the questionnaires were administered, was constructed for the assessment of the entrepreneurial potential and it contains nine open questions structured along six dimensions: ability to select relevant information about oneself; previous entrepreneurial experience; opportunities to initiate a business in the future; awareness of training needs; level of motivation; personal project including independent business. The open answers were evaluated on a 5-step scale, for the six dimensions. The sum of scores (from 6 to 30 points) was considered as indicating the candidate's potential to start a business. The internal consistency of the interview scales is .91. The internal validity of the interview is highlighted also by the significant association between the global score of the interview, indicating the potential of opening an independent business, and the scores for each dimension in the interview (Table 1).

Table 1. Correlations between the entrepreneurial potential (global score for the interview) and the scores of the dimension evaluated in the interview

		Relevant information	**Previous experience**	**Opportunities**	**Awareness**	**Motivation**	**Personal project**
Global score	r	.753***	.822***	.855***	.832***	.889***	.898***
	p	.000	.000	.000	.000	.000	.000
	N	215	215	215	215	215	215

The Proactive Personality Scale (Bateman & Crant, 1993) was translated to Romanian. The scale consists of 17 items, evaluated on a 5-step scale (from "very little" to "very much"). The internal consistency of the English original version, for three different samples, was between Cronbach's alpha .87 and .89. For the Romanian version, the coefficient was .86.

The Entrepreneurial Personality Inventory was constructed for the purpose of this research, based on several theoretical models and it comprises seven scales with the following Cronbach's alpha coefficients: risk propensity (21 items)—.77; social skills (13 items)—.71; entrepreneurial skills (17 items)—.80; creativity (17 items)—.69; independence (17 items)—.65; achievement motivation (17 items)—.74; resource organization (10 items)—.73.

Multidimensional Locus of Control Scale (Levenson, 1981) was translated to Romanian. This 24-item scale measures the degree to which the individual feels in control over his or her own life or to what extent he or she feels that powerful others, or chance, control his or her life. We obtained the following Cronbach's alpha coefficients for each of the three scales: Internal control scale—.54; Powerful others control scale—.75; Chance—.71.

The Self-Evaluation Inventory of the Entrepreneurial Knowledge, constructed for this study, consists of a list of knowledge areas to be evaluated on two 5-step scales: "the level of importance of the knowledge for my (future) business", and "my actual level of knowledge." The list contains 43 knowledge areas, selected from the training modules. The difference between the global score for the level of importance and the global score for the actual level of knowledge is considered an indicator of the training needs.

3. Results

In order to test the hypotheses concerning the association between the potential of opening an independent business and the personality traits, we used the Pearson correlation coefficients (Table 2). The results revealed that the personality traits associated with the entrepreneurial potential (global score of the interview) are: entrepreneurial skills; resource organization; internal locus of control; creativity.

Table 2. Pearson correlation between the entrepreneurial potential (global score for the interview) and the personality inventory dimensions

		Social skills	Entrepreneurial skills	Creativity	Independence	Achievement motivation	Resource organization	Internal Locus	Proactivity
Entrepreneurial potential (interview)	r	.046	.299***	.158*	.057	.042	.170*	.166*	.122
	p	.504	.000	.021	.403	.544	.012	.015	.075
	N	215	215	215	215	215	215	215	215

Other self-rated traits, such as social skills, independence, achievement motivation, and proactivity are not associated with the entrepreneurial potential in our study. A possible explanation can be the professional status of the participants: all participants were students, most of them with little previous experience in the field of business.

As a self-rated trait, entrepreneurial skills are highly significantly associated (r between .221 and .265; $p < .001$) with all the dimensions evaluated during the interview: relevant information, previous experience, opportunities, awareness of training needs, motivation and personal project. A second self-rated trait—resource organization—is significantly associated with four out of six dimension evaluated during the interview: relevant information (r = .158; p = .021), awareness of training needs (r = .187; p = .006), motivation (r = .180; p = .008), and personal project (r = .148; p = .03). Internal locus of control is associated with awareness of the training needs (r = .140; p = .04), motivation (r = .203; p = .003), and personal project (r = .151; r = .026). Creativity is associated with previous experiences (r = 136; p = .046), opportunities (r = .148; p = .03), and motivation (r = .153; p = .025). The significant correlations obtained between self-rated entrepreneurial traits and the dimensions assessed in the interview highlight the idea that the participants had a self-assessment consistent with that of the interviewer.

Two of the dimensions evaluated during the interview showed significant correlations with some of the self-rated personality traits: the level of motivation for the business field is significantly associated with entrepreneurial skills (r = .263; $p < .001$), internal locus of control (r = .203; p = .003), resource organization (r = .180; p = .008), creativity (r = .153; p = .025), and proactivity (r = .151; p = .026); the personal project involving an independent business is significantly associated with entrepreneurial skills (r = .243; $p < .001$), internal locus of control (r = .151; p = .026), and resource organization (r = .148; p = .030).

As for the risk propensity, although the majority of studies highlighted the relationship between entrepreneurial performance and moderate risk propensity, in our research there is no relationship between the assessed potential of opening a business and the level of risk propensity. There are no significant differences in entrepreneurial potential between high, average and low level risk propensity ($F_{(2,214)} = 1{,}54$; p = .21).

For the participants, comparing the level of importance, for their future business, of a knowledge aria and its actual level of achievement was a way of identifying their training needs. The discrepancy between the two scales was considered as an indicator of their awareness of these needs. The value of the paired-samples t test for the differences between the two scales is highly significant ($t_{(208)} = 31{,}32$; $p < .001$).

The evaluated entrepreneurial potential (i.e. global interview score) and the scores for each dimension are strongly associated with the self-assessed training needs, meaning that the best evaluated participants have a better understanding of the importance of knowledge for fulfilling their desire to initiate an independent business and, at the same time, are aware of the level of their actual knowledge. The training needs are closely associated with all the dimensions evaluated in the interview: more training needs the individual identifies for himself, more he or she has previous experience and has in his or her social context opportunities to develop an independent business; similarly, he or she is more motivated for independent business, has a personal project including business and is more able to give relevant information about oneself (Table 3).

Table 3. Pearson correlation between the training needs, the entrepreneurial potential (global score) and the six dimensions measured in interview

		Entrepreneurial potential (interview)	Relevant information	Previous experience	Opportunity	Awareness of the training needs	Business motivation	Personal project
Training needs	r	.296***	.233***	.323***	.275***	.215**	.251***	.197**
	p	.000	.001	.000	.000	.002	.000	.004
	N	208	208	208	208	208	208	208

Their enrolment for the entrepreneurship training can be seen as an expression of their intention to become entrepreneurs in the future. These results confirm our assumption that the participants were aware of the level of their potential and of the possibility to become entrepreneurs when they have decided to participate in the training.

4. Discussion and conclusions

The results in our research confirm the relationship between the entrepreneurial potential and some personality traits such as entrepreneurial skills, resource organization, creativity, and internal locus of control, but not with all the variables measured. This confirms partially the results in the field, but further research is needed to clarify the relationship between personality traits and the real-life success of the participants.

The relationship between risk propensity and entrepreneurial behaviour proved to be not clear enough and we think that this is because of the particularities of the participants and their status related to business. They were only at the level of intent regarding becoming an entrepreneur and it was not possible to correlate their risk propensity with any real performance or behaviour.

The participants with high entrepreneurial potential proved to see themselves as having more training needs in the field of business, this could be related to the fact that they already tend to have some previous experience, opportunities to start a business and they have a personal project that includes a career in an independent business and are more motivated for this. Also, during the interview, they showed more concern for developing entrepreneurial competences, but this could be, however, an effect of making a good impression.

Our research is intended to be the beginning of a longitudinal study concerning the evolution of the candidates for a 2 year program developed under a national project for increasing the entrepreneurship of university students belonging to the three Bologna cycles: bachelor, master and doctoral. The students were selected on the base of a set of personality questionnaires and an interview. They are now in training and their capability of developing an independent business will be evaluated at the end of the courses and two years after the end of the program. We were interested in following their evolution and comparing the results from the selection procedure with their achievements in the field of business. The project offers material and financial support for developing an independent business.

The research aims to realize a follow-up of the participants in the project and to identify the relationship between the measured variables and the actual rate of succeeding in opening a personal business in the next two years. The instruments developed for the research proved to have good psychometric qualities, but need to be refined. The population of our research was self-selected by the intention of becoming entrepreneur and enrolling in the program. Some rate of drop-out is expected to happen during the training program and some during the two year period of follow-up. Having in the database their demographic and personality data, we hope to be able to identify the variables that help the participants to benefit the training most.

The instruments need to be tested on a general population, with similar demographic characteristics, but not involved in business or business training, in order to see the similarities and dissimilarities between the two groups. A comparison between those who will succeed and those who will not succeed at the end of the project will help us to identify the personality variables that could be considered as predictors for entrepreneurial start-ups, but not for predicting the survival of those start-ups.

Acknowledgements

The research was developed in the frame of the national project EDU-ANTREPRENOR - RO POSDRU/9/3.1/S/9.

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